

What is claimed is:

1. A method of forming an energy subtraction image, comprising the steps of:

5 i) obtaining a plurality of radiation image signals respectively representing a plurality of radiation images of an object, which radiation images have been formed with several kinds of radiation having different energy distributions, and

10 ii) forming an energy subtraction image signal from the plurality of the radiation image signals,

15 wherein the energy subtraction image signal is formed as an energy subtraction image signal having a pixel density lower than the pixel density of each of the radiation image signals.

20 2. A method as defined in Claim 1 wherein the pixel density of each of the radiation image signals is lowered, a plurality of low pixel density radiation image signals being thereby acquired, subtraction processing is performed by utilizing the plurality of the thus acquired low pixel density radiation image signals, and the energy subtraction image signal having the pixel density lower than the pixel density of each of the radiation image signals is thereby formed.

25 3. An apparatus for forming an energy subtraction image, comprising:

20 i) means for obtaining a plurality of radiation image signals respectively representing a plurality of radiation images of an object, which radiation images have been formed with several kinds of radiation having different energy distributions, and

10 ii) image processing means for forming an energy subtraction image signal from the plurality of the radiation image signals,

5 wherein the image processing means forms the energy subtraction image signal as an energy subtraction image signal having a pixel density lower than the pixel density of each of the radiation image signals.

15 4. An apparatus as defined in Claim 3 wherein the image processing means comprises:

20 a pixel density transforming section for receiving the plurality of the radiation image signals, and lowering the pixel density of each of the radiation image signals in order to form a plurality of low pixel density radiation image signals, and

25 an operation processing section for receiving the plurality of the low pixel density radiation image signals, which have been formed by the pixel density transforming section, and forming the energy subtraction image signal, which has the pixel density lower than the pixel density of each of the radiation image signals, from the low pixel density radiation image signals.

30 5. An apparatus as defined in Claim 3 or 4 wherein the apparatus further comprises means for transferring the plurality of the radiation image signals and the energy subtraction image signal toward an external device or feeding out the plurality of the radiation image signals and the energy subtraction image signal toward storage means for storing the plurality of the radiation image signals and the energy subtraction image signal.

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